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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/526,139	02/25/2005	Goro Fujita	09812.0485-00000	6282

22852 7590 01/04/2008  
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WASHINGTON, DC 20001-4413

EXAMINER
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CROW, ROBERT THOMAS

ART UNIT	PAPER NUMBER
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1634

MAIL DATE	DELIVERY MODE
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01/04/2008

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b>		<b>Applicant(s)</b>	
	10/526,139		FUJITA, GORO	
	<b>Examiner</b>		<b>Art Unit</b>	
	Robert T. Crow		1634	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 11 October 2007.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-10 is/are pending in the application.
- 4a) Of the above claim(s) 7-10 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-6 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                                | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                       | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## DETAILED ACTION

### *Continued Examination Under 37 CFR 1.114*

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 11 October 2007 has been entered.

### *Status of the Claims*

2. This action is in response to papers filed 11 October 2007 in which claims 1 and 3-4 were amended, no claims were canceled, and no new claims were added. All of the amendments have been thoroughly reviewed and entered.

The previous rejections under 35 U.S.C. 112, second paragraph, are withdrawn in view of the amendments.

The previous rejections under 35 U.S.C. 102(b) and 35 U.S.C. 103(a) not reiterated below are withdrawn in view of the amendments. Applicant's arguments have been thoroughly reviewed and are addressed following the rejections necessitated by the amendments.

Claims 1-6 are under prosecution.

### *Claim Rejections - 35 USC § 102*

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claims 1-6 are rejected under 35 U.S.C. 102(b) as being anticipated by Iwasaki et al (Japanese Patent Application Publication No 2001-238674, published 9 April 2001). Citations are to the machine translation of the document provided by the National Center of Industrial Property Information and Training website <[http://www.ipdl.ncipi.go.jp/homepg\\_e.ipdl](http://www.ipdl.ncipi.go.jp/homepg_e.ipdl)>. The machine translation of the document is provided with this Office Action).

Regarding claim 1, Iwasaki et al teach a bioassay substrate. In a single exemplary embodiment, Iwasaki et al teach the disc-shaped bioassay substrate of Figures 1 and 2, which comprises optically interpretable recorded information in the form of tracking marks 5 and address marks 6 (Description of the Drawings). The disc further comprises a plurality of detection units comprising a data detecting area comprising a reaction area for performing a mutual reaction process between substances to be detected and a target substance; namely, Figure 2 shows the partitioned area of a glass surface 8 following track mark 5 comprising spot 9 (Figure 2, paragraph 0049 of the Detailed Description, and the Description of the Drawings). The area of the glass surface is the reaction area, which further comprises a detection surface for fixing end portions of the substances to be detected in the form of spot 9, to which DNA molecules are fixed (paragraph 042 and 0049 of the Detailed Description, Figure 2, and the Description of the Drawings).

It is noted that the claim requires "a detection surface for fixing end portions of the substances to be detected." The claim therefore only requires an area for fixing, and does not actually require substances to be fixed to the area. Thus, the limitation "a detection surface for fixing end portions of the substances to be detected" merely recites an **intended use** of the detection surface.

Iwasaki et al further teach a servo are formed in the detection unit without overlapping the data detecting area; namely, the servo area comprises track mark 5 and address mark 6, which are separate from and non-overlapping with spot 9 (paragraphs Figure 2 and the Description of the Drawings). The servo area and the detection area are arrayed together circumferentially (i.e., as a partition along the die

length; paragraph 0049 of the Detailed Description and Figures 1-2). The address marks optically provide information on the data detecting area (paragraph 0064 of the Detailed Description).

Regarding claim 2 Iwasaki et al teach the substrate of claim 1, wherein the reaction area comprises a detection surface on which a surface treatment is performed to as to fix the substances to be detected; namely, the glass surface of the disc is treated with a silane so that DNA probes, which are the substances to be detected, are fixed (paragraph 0080 of the Means).

Regarding claim 3, Iwasaki et al teach the substrate of claim 1, wherein the substances to be detected and the target substances are nucleotides and the mutual reaction process is hybridization; namely, the disc detects hybridization between fixed DNA probes and target DNA (paragraphs 0015-0020 of the Detailed Description); DNA molecules are nucleotide chains.

Regarding claim 4, Iwasaki et al teach the substrate of claim 1, wherein the detection units are arrayed along the circumferential direction; namely, the partition comprising a mark and spot is arrayed in a concentric circle, and the partition divisions are carried out along the die-length (i.e., circumference; paragraphs 0049-0050 of the Detailed Description and Figures 1-2).

Regarding claim 5, Iwasaki et al teach the substrate of claim 1, wherein the detection units (i.e., partitions) are arrayed in concentric circles or spiral shapes (paragraph 0050).

Regarding claim 6, Iwasaki et al teach the substrate of claim 1, wherein the positional information comprises tracking mark 5 and address mark 6, which are separate from an non-overlapping with spot 9 (paragraphs Figure 2 and the Description of the Drawings).

#### *Response to Arguments*

5. Applicant's arguments with respect to the previous rejections of the claims have been considered but are moot in view of the new ground(s) of rejection necessitated by the amendments.

*Conclusion*

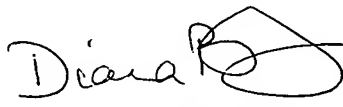
6. No claim is allowed.

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Robert T. Crow whose telephone number is (571) 272-1113. The examiner can normally be reached on Monday through Friday from 8:00 am to 4:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ram Shukla can be reached on (571) 272-0735. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Robert T. Crow  
Examiner  
Art Unit 1634

  
DIANA JOHANNSEN  
PRIMARY EXAMINER